STATEMENT OF WORK FOR THE REMEDIAL DESIGN AND REMEDIAL ACTION AT THE SAUGET AREA 2 SITE ST. CLAIR COUNTY, ILLINOIS

I. PURPOSE

The purpose of this Statement of Work (SOW) is to set forth requirements for implementation of the remedial action set forth in the Record of Decision (ROD), which was signed by the Regional Administrator of U.S. EPA Region 5 on September 30, 2002, for the Sauget Area 2 Site (Site) Groundwater Operable Unit (OU-2). The Settling Defendants shall follow the ROD, the SOW, the approved Remedial Design, Remedial Action (RD/RA) Work Plan, U.S. EPA Superfund Remedial Design and Remedial Action Guidance and any additional guidance provided by U.S. EPA in submitting deliverables for designing and implementing the remedial action for OU-2.

II. DESCRIPTION OF THE REMEDIAL ACTION/PERFORMANCE STANDARDS

Settling Defendants shall design and implement the Remedial Action to meet the performance standards and specifications set forth in the ROD and this SOW. Performance standards shall include cleanup standards, standards of control, quality criteria and other substantive requirements, criteria or limitations including all Applicable or Relevant and Appropriate Requirements (ARARs) set forth in the ROD, SOW and/or Unilateral Administrative Order (UAO) and further identified during the RD when the groundwater treatment option is determined.

1. Site Security

The Settling Defendants shall regularly inspect, maintain, properly repair or replace the fence and any portion thereof at the Site during the Remedial Design/Remedial Action and Operation and Maintenance (O&M), to prevent access and vandalism to the Site. Warning signs on the fence shall also be maintained.

2. Restrictive Covenants/Deed Restrictions

Institutional controls will be utilized to limit fishing in the plume release area by limiting site access, posting warning signs, and implementing a public education program.

3. Groundwater Containment System

A. Barrier Wall

The Settling Defendants shall design, construct and maintain a 3,500 foot long,

"U"-shaped, fully penetrating, jet grout barrier wall between the downgradient boundary of Sauget Area 2 Site R and the Mississippi River to abate the release of impacted groundwater. The purpose of the barrier wall is to minimize the volume of groundwater that has to be extracted to ensure equal heads on both sides of the wall. It will extend along the entire 2,000 foot north/south length of Site R with the arms of the "U" extending approximately 750 feet to the east (upgradient), past the eastern boundary of Site R and terminating before the USACE floodwall. The barrier wall will be taken to the top of the bedrock surface which is expected to be in the range of 120 to 140 feet deep. The injection holes will be drilled a few feet into the rock to ensure that the injection ports are at the same elevation as the top of the rock. The geometry and installation methods for the wall will be optimized during the remedial design. The jet grout wall will be designed to produce a continuous barrier with minimal gaps. discontinuities may occur because of very localized geologic variations. These discontinuities, if they exist, are expected to be very minor and will not materially affect the performance of the system. Larger discontinuities will be identified by the QA/QC program and addressed.

Quality control measures will include the construction of test cells prior to wall construction and evaluation of the integrity by performing a pump drawdown test within the cell, pre-drilling the grout injection holes and gauging each hole with an inclinometer to ensure verticality, and coring the completed panels at regular intervals to check for strength and soil-grout consistency.

B. Groundwater Extraction

The Settling Defendants shall design, install, operate and maintain a groundwater extraction system to abate groundwater discharging to the wall. A system of 3 partially penetrating groundwater recovery wells pumping from 303 to 724 gpm is thought to be necessary to abate groundwater discharging to the wall. However, final number of wells and placement and extraction rates are subject to change by USEPA. Modeling indicates that groundwater is released to the Mississippi River for high, average and low river stage conditions at 303, 535 and 724 gpm, respectively (Volume II - Design Basis and Design). The wells will be installed inside the "U"-shaped barrier wall. A river stage gage will be installed in the Mississippi River downgradient of Site R. Water level information from the gage will be sent by telemetry to the pump controller that will adjust the variable frequency drives to produce the required pumping rates to control the groundwater discharging to the barrier wall (Volume II - Design Basis and Design).

Operation of the extraction system used to contain the contaminated groundwater within the barrier wall may only be terminated at the written direction of U.S. EPA. However, the Settling Defendants may petition U.S. EPA to modify the extraction system based on such factors as attainment of groundwater standards outside the barrier wall or performance data from the system that

indicates that performance standards can be met under other operating conditions. The Settling Defendants shall monitor the system's performance on a regular basis. U.S. EPA may require adjustments to the system as U.S. EPA deems warranted by the performance data collected during its operation. Examples of adjustments which may be required by U.S. EPA are additional groundwater extraction wells and/or increased pumping rates.

C. Groundwater Treatment

The Settling Defendants shall pump the extracted groundwater to a groundwater treatment system for removal of chemicals. Selection of the actual treatment technologies and the location of the treatment system will be determined during the remedial design. treatment component of the groundwater alternative will presumptive technologies utilize identified in groundwater presumptive strategy, "Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Ground Water at CERCLA Site", October 1996, Office of Solid Waste and Emergency Response (OSWER) Directive 9283.1-12. contaminants of include volatile concern semivolatile compounds, organic one or more of presumptive technologies - air stripping, granular activated carbon (GAC), chemical/UV oxidation and aerobic biological reactors - will be used for treating aqueous contaminants in the extracted ground water. Other technologies may also be needed in the treatment system for removal of suspended mineral solids and treatment of vapor phase contaminants. The actual technologies and sequence of technologies used for the treatment system will be determined during the Final selection of these technologies will remedial design. be based on additional site information to be collected during the remedial design. Based on this information and sound engineering practice, the treatment system shall be designed to attain the chemical-specific discharge pretreatment requirements and other performance criteria in compliance with ARARs. Other design factors shall include maximizing long- term effectiveness, maximizing long-term reliability (i.e., minimizing the likelihood of process upsets), and minimizing long-term operating costs. groundwater will ultimately be discharged to the Mississippi Any discharge to the Mississippi River will be in compliance with all ARARs.

4. <u>Installation and Operation of Monitoring Program for Remedial Action</u>

Settling Defendants shall implement monitoring program(s) to evaluate and ensure that the construction and implementation of the Remedial Action comply with approved plans and design documents and performance standards. Settling Defendants shall submit monitoring programs as part of the Remedial Design Work Plan, which shall address the specific components of the remedial action listed below. Each sample shall be analyzed for a list of parameters approved by U.S. EPA during design.

A. Groundwater Quality Monitoring

The Settling Defendants shall implement a groundwater quality monitoring program as identified in the ROD and the RD Work Plan. Groundwater quality samples will be collected downgradient of the physical barrier to determine mass loading to the Mississippi River resulting from any contaminants migrating through, past or beneath the barrier wall. The Settling Defendants shall collect groundwater quality samples from four monitoring well clusters identified in the ROD. Samples will be analyzed for VOCs, SVOCs, Herbicides, Pesticides and Metals. TOC and TDS will also be determined for each sample. Each well cluster will consist of monitoring wells screened in the Shallow. Middle and Deep Hydrogeologic Units. A total of twelve monitoring wells will be installed. Settling Defendants shall collect groundwater quality samples quarterly until the final groundwater remedy and associated groundwater monitoring program for the Sauget Area 2 Site is in place. Mass loading for each hydrogeologic unit will be calculated using average TOC and TDS concentration in the unit. Total mass loading to the Mississippi River will be determined by summing the mass loads for the SHU, MHU and DHU. Total mass loading will be plotted over time to track changes in the amount of mass discharging to the Mississippi River.

If additional information indicates that the groundwater monitoring program is inadequate, U.S. EPA may require additional groundwater monitoring wells and laboratory analysis of additional parameters.

B. Groundwater Level Monitoring

Settling Defendants shall implement a groundwater level monitoring program to ensure acceptable performance of the physical barrier. Soil samples from the borings completed for the purpose of installing water-level piezometers will be screened for the presence of NAPL. In addition, existing wells downgradient of Sauget Area 2 Site R will be measured for accumulation of NAPL.

Settling Defendants shall monitor groundwater levels at the physical barrier to determine if gradient control is achieved. Gradient control will be determined by:

- Comparing the water-level elevations in pairs of fully penetrating water-level piezometers installed at the northwest corner of the barrier wall, southwest corner, halfway between the south pumping well and the center pumping well, and halfway between the north pumping well and the center pumping well as specified in the One piezometer of each pair will be installed inside the barrier wall and one will be installed outside it. Pumping rates will be adjusted so that the water-level elevation in the inside piezometer is the same as the water-level elevation in the outside piezometer. This will ensure that groundwater discharging to the physical barrier is controlled. Electronic water-level recorders will be installed in each piezometer and telemetry will be used to send the water-level data to the pump controller. Groundwater elevations inside and outside the barrier wall will be compared by the pump controller and pumping rates will be adjusted to maintain the same groundwater level elevation inside the barrier wall as measured outside the wall.
- Groundwater levels will be measured manually on a quarterly basis in existing wells B-21B, B-22A, B-24C, B-25A, B-25B, B-26A, B-26B, B-28A, B-28B and B-29B to supplement gradient control information from the water-level piezometers.

C. Sediment and Surface Water Monitoring

Settling Defendants shall collect sediment and surface water samples in the plume discharge area to determine the effect of any contaminants migrating through, past or beneath the barrier wall and discharging to the Mississippi River. Impact will be determined by comparing constituent concentrations to site-specific, toxicity-based, protective concentrations derived from existing sediment and surface water chemistry and toxicity data. An Apparent Effects Threshold approach will be used to derive site-specific, protective constituent concentrations for sediments and a Toxic Units approach will be used to derive site-specific, protective constituent concentrations for surface water.

Surface water and sediment samples will be collected at Sediment Sampling Stations - 2, 3, 4, 5 and 9, where toxicity was observed in October/November 2000, and analyzed for VOCs, SVOCs, Herbicides, Pesticides and Metals. Constituent concentrations will be plotted as a function of time and compared to the site-specific, toxicity-based,

protective concentrations to determine progress toward achieving these targets.

Settling Defendants shall conduct sediment and surface water sampling twice a year, once during the summer low flow period and once during the winter low flow period, when groundwater discharge to the Mississippi River is high.

III. SCOPE OF REMEDIAL DESIGN AND REMEDIAL ACTION

The Remedial Design/Remedial Action shall consist of five tasks. All plans are subject to USEPA approval in consultation with the Illinois EPA.

- Task 1: RD/RA Work Plan
- Task 2: Remedial Design Phases
 - A. Prefinal Design/Final Design

Task 3: Remedial Action/Construction

- A. Preconstruction Meeting
- B. Prefinal Inspection
- C. Final Inspection
- D. Reports
 - 1. Final Construction Report
 - 2. Completion of Remedial Action Report
 - 3. Completion of Work Report

Task 4: Operation and Maintenance

Task 5: Performance Monitoring

Task 1: RD/RA Work Plan

The Settling Defendants shall submit an RD/RA Work Plan which shall document the overall management strategy for performing the design, construction, operation, maintenance and monitoring of the RD/RA, and which includes a detailed description of the remediation and construction activities. The RD/RA Work Plan shall include a project schedule for each major activity and submission of deliverables generated during the RD/RA for review and approval by the USEPA, in consultation with the Illinois EPA. The plan shall document the responsibility and authority of all organizations and key personnel involved with implementation and shall include a description of qualifications of key personnel directing

the RD/RA, including contractor personnel. The RD/RA Work Plan shall also contain a schedule of RD/RA activities.

Task 2: Remedial Design Phases

Settling Defendants shall prepare construction plans and specifications to implement the Remedial Actions at the OU described in the ROD and this SOW. Plans specifications shall be submitted in accordance with the schedule set forth in Section V below. Subject to approval by USEPA, Settling Defendants may submit more than one set of design submittals reflecting different components of the Remedial Action. All plans and specifications shall be developed in accordance with U.S. EPA's Superfund Remedial Design and Remedial Action Guidance (OSWER Directive No. 9355.0-4A) and shall demonstrate that the Remedial Action shall meet all objectives of the ROD, the UAO and this SOW, including all Performance Standards. Settling Defendants shall meet regularly with USEPA to discuss design issues.

C. Prefinal and Final Designs

Settling Defendants shall submit the Prefinal Design when the design effort is 95% complete and shall submit the Final Design when the design effort is 100% complete. The Prefinal Design shall fully address, to the satisfaction of USEPA, all comments made by the USEPA during the course of any meetings, conference calls, or discussions during the remedial design phase. The Final Design shall fully address all comments made to the Prefinal Design and shall include reproducible drawings and specifications suitable for bid advertisement. The Prefinal Design shall serve as the Final Design if USEPA has no further comments and issues the notice to proceed.

The Prefinal Design submittal shall include or discuss, at a minimum, the following:

- Preliminary plans, drawings, and sketches, including design calculations;
- Results of treatability studies and additional field sampling;
- Design assumptions and parameters, including design restrictions, process performance criteria, appropriate unit processes for the treatment train, and expected removal or treatment efficiencies for both the process and waste (concentration and volume);

- Proposed cleanup verification methods, including compliance with Applicable or Relevant and Appropriate Requirements (ARARs);
- Outline of required specifications;
- Proposed siting/locations of processes/construction activity;
- Expected long-term monitoring and operation requirements;
- Real estate, easement, and permit requirements;
- Preliminary construction schedule, including contracting strategy.
- Draft Performance Standard Verification Plan;
- Draft Construction Quality Assurance Plan;
- Draft QAPP/Draft Health and Safety Plan/Draft Field Sampling Plan/Draft Contingency Plan.

Final Design submittal shall include those elements listed for the Prefinal Design, as well as, the following:

- Final Performance Standard Verification Plan;
- Final Construction Quality Assurance Plan;
- Final QAPP/Final H & S Plan/Final FSP/Final Contingency Plan;
- Draft Operation and Maintenance Plan;
- Capital and Operation and Maintenance Cost Estimate.

 This cost estimate shall refine the FS cost estimate to reflect the detail presented in the Final Design;
- Final Project Schedule for the construction and implementation of the Remedial Action which identifies timing for initiation and completion of all critical path tasks. The final project schedule submitted as part of the Final Design shall include specific dates for completion of the project and major milestones.

Task 3: Remedial Action Construction

The Settling Defendants shall implement the Remedial Action as detailed in the approved Final Design. The following activities shall be completed in constructing the Remedial Action.

A. Preconstruction inspection and meeting:

The Settling Defendants shall participate with the USEPA and the State in a preconstruction inspection and meeting to:

- a. Review methods for documenting and reporting inspection data;
- b. Review methods for distributing and storing documents and reports;
- c. Review work area security and safety protocol;
- d. Discuss any appropriate modifications of the construction quality assurance plan to ensure that site-specific considerations are addressed; and,
- e. Conduct a Site walk-around to verify that the design criteria, plans, and specifications are understood and to review material and equipment storage locations.

The preconstruction inspection and meeting shall be documented by a designated person and minutes shall be transmitted to all parties.

B. Prefinal inspection:

Within 15 days after Settling Defendants make preliminary determination that construction is complete, the Settling Defendants shall notify the USEPA and the State for the purposes of conducting a prefinal inspection. The prefinal inspection shall consist of a walk-through inspection of the entire Facility with USEPA. The inspection is to determine whether the project is complete and consistent with the contract documents and the Remedial Action. Any outstanding construction items discovered during the inspection shall be identified and noted. Additionally, treatment equipment shall be operationally tested by the Settling Defendants. The Settling Defendants shall certify that the equipment has performed to purpose and meet the intent specifications. Retesting shall be completed where deficiencies are revealed. The prefinal inspection report shall outline the outstanding construction items, actions required to resolve items, completion date for these items, and a proposed date for final inspection.

C. Final inspection:

Within 15 days after completion of any work identified in the prefinal inspection report, the Settling Defendants shall notify the U.S. EPA and the State for the purposes of conducting a final inspection. The final inspection shall consist of a walk-through inspection of the Facility by U.S. EPA and the Settling Defendants. The prefinal inspection the shall be used as a checklist with inspection focusing on the outstanding construction items identified in the prefinal inspection. Confirmation shall be made that outstanding items have been resolved.

D. Reports

1. Final Construction Report

Within 30 days of a successful final inspection, Settling Defendants shall submit a Construction Completion Report. In the report, a registered professional engineer and the Settling Defendants' Project Coordinator shall state that the Remedial Action has been constructed in accordance with the design and specifications. The written report shall include as-built drawings signed and stamped professional engineer. The report shall contain following statement, signed by a responsible corporate official of a Settling Defendant or the Settling Defendants' Project Coordinator:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Task 4: Operation and Maintenance

The Settling Defendants shall prepare an Operation and Maintenance (O&M) Plan to cover both implementation and long term maintenance of the Remedial Actions. An initial Draft O&M Plan shall be submitted as a final Design Document submission. The final O&M Plan shall be submitted to U.S. EPA prior to the pre-final construction inspection, in accordance with the approved construction schedule. The plan shall be composed of the following elements:

Description of normal operation and maintenance;

- a. Description of tasks for operation;
- b. Description of tasks for maintenance;
- c. Description of prescribed treatment or operation conditions; and
- d. Schedule showing frequency of each O&M task.
- 2. Description of potential operating problems;
 - a. Description and analysis of potential operation problems;
 - b. Sources of information regarding problems; and
 - c. Common and/or anticipated remedies.
- Description of routine monitoring and laboratory testing;
 - a. Description of monitoring tasks;
 - b. Description of required data collection, laboratory tests and their interpretation;
 - c. Required quality assurance, and quality control;
 - d. Schedule of monitoring frequency and procedures for a petition to USEPA to reduce the frequency of or discontinue monitoring; and
 - e. Description of verification sampling procedures if Cleanup or Performance Standards are exceeded in routine monitoring.
- Description of alternate O&M;
 - a. Should systems fail, alternate procedures to prevent release or threatened releases of hazardous substances, pollutants or contaminants which may endanger public health and the environment or exceed performance standards; and
 - b. Analysis of vulnerability and additional resource requirement should a failure occur.
- 5. Corrective Action;
 - a. Description of corrective action to be implemented in the event that cleanup or performance standards are exceeded; and
 - b. Schedule for implementing these corrective actions.
- 6. Safety plan;
 - a. Description of precautions, of necessary equipment, etc., for Site personnel; and

- b. Safety tasks required in event of systems failure.
- 7. Description of equipment; and
 - a. Equipment identification;
 - b. Installation of monitoring components;
 - c. Maintenance of Site equipment; and
 - d. Replacement schedule for equipment and installed components.
- 8. Records and reporting mechanisms required.
 - a. Operating logs;
 - b. Laboratory records;
 - c. Records for operating costs;
 - d. Mechanism for reporting emergencies;
 - e. Personnel and maintenance records; and
 - f. Reports, as required, pursuant to the approved Final O&M Plan.

Task 5: Performance Monitoring

Performance monitoring shall be conducted to ensure that all Performance Standards are met.

A. Performance Standard Verification Plan

The purpose of the Performance Standard Verification Plan is to provide a mechanism to ensure that both short-term and long-term Performance Standards for the Remedial Action are met. The Draft Performance Standards Verification Plan shall be submitted with the Intermediate Design. Once approved, the Performance Standards Verification Plan shall be implemented on the approved schedule. The Performance Standards Verification Plan shall include:

- 1. Quality Assurance Project Plan
- 2. Health and Safety Plan
- 3. Field Sampling Plan

IV. CONTENT OF SUPPORTING PLANS

The documents listed in this section -- the Quality Assurance Project Plan, the Field Sampling Plan, the Health and Safety Plan, the Contingency Plan and the Construction Quality Assurance Plan -- are documents which must be prepared and submitted as outlined in Section III of this SOW. The following section describes the required contents of each of these supporting plans.

A. Quality Assurance Project Plan

The Settling Defendants shall develop a Site specific Quality Assurance Project Plan (QAPP), covering sample analysis and data handling for samples collected in all phases of future Site work, based upon the Consent Decree and guidance provided by USEPA. The QAPP shall be consistent with the requirements of the EPA Contract Lab Program (CLP) for laboratories proposed outside the CLP. The QAPP shall at a minimum include:

Project Description

- * Facility Location History
- * Past Data Collection Activity
- * Project Scope
- * Sample Network Design
- * Parameters to be Tested and Frequency
- * Project Schedule

Project Organization and Responsibility

Quality Assurance Objective for Measurement Data

- * Level of Quality Control Effort
- * Accuracy, Precision and Sensitivity of Analysis
- * Completeness, Representativeness and Comparability

Sampling Procedures

Sample Custody

- * Field Specific Custody Procedures
- * Laboratory Chain of Custody Procedures

Calibration Procedures and Frequency

- * Field Instruments/Equipment
- * Laboratory Instruments

Analytical Procedures

- * Non-Contract Laboratory Program Analytical Methods
- * Field Screening and Analytical Protocol
- * Laboratory Procedures

Internal Quality Control Checks

- * Field Measurements
- * Laboratory Analysis

Data Reduction, Validation, and Reporting

- * Data Reduction
- * Data Validation
- * Data Reporting

Performance and System Audits

- * Internal Audits of Field Activity
- * Internal Laboratory Audit
- * External Field Audit
- * External Laboratory Audit

Preventive Maintenance

- * Routine Preventative Maintenance Procedures and Schedules
- * Field Instruments/Equipment
- * Laboratory Instruments

Specific Routine Procedures to Assess Data Precision, Accuracy, and Completeness

- * Field Measurement Data
- * Laboratory Data

Corrective Action

- * Sample Collection/Field Measurement
- * Laboratory Analysis

Quality Assurance Reports to Management

The Settling Defendants shall participate in a pre-QAPP meeting/conference call with U.S. EPA.

B. Health and Safety Plan

The Settling Defendants shall develop a health and safety plan which is designed to protect on-site personnel and area residents from physical, chemical and all other hazards posed by this remedial action. The safety plan shall develop the performance levels and criteria necessary to address the following areas:

Facility Description
Personnel
Levels of protection
Safe work practices and safe guards
Medical surveillance
Personal and environmental air monitoring
Personal protective equipment
Personal hygiene
Decontamination - personal and equipment
Site work zones
Contaminant control
Contingency and emergency planning
Logs, reports and record keeping

The safety plan shall follow U.S. EPA guidance and all OSHA requirements as outlined in 29 CFR 1910 and 1926.

C. Contingency Plan

Settling Defendants shall submit a Contingency Plan describing procedures to be used in the event of an accident or emergency at the site. The Contingency Plan may be part of the Health and Safety Plan or a separate document. The draft Contingency Plan shall be submitted with the prefinal design and the final Contingency Plan shall be submitted with the final design. The Contingency Plan shall include, at a minimum, the following:

1. Name of the person or entity responsible for responding

in the event of an emergency incident.

- 2. Plan and date(s) for meeting(s) with the local community, including local, State and Federal agencies involved in the cleanup, as well as local emergency squads and hospitals.
- 3. First aid medical information.
- 4. Air Monitoring Plan (if applicable).
- 5. Spill Prevention, Control, and Countermeasures (SPCC) Plan (if applicable), as specified in 40 CFR Part 109 describing measures to prevent and contingency plans for potential spills and discharges from materials handling and transportation.

C. Field Sampling Plan

The Settling Defendants shall develop a field sampling plan (as described in "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," October 1988). The Field Sampling Plan should supplement the QAPP and address all sample collection activities.

D. Construction Quality Assurance Plan

Settling Defendants shall submit a Construction Quality Assurance Plan (CQAP) which describes the Site specific components of the quality assurance program which shall ensure that the completed project meets or exceeds all design criteria, plans, and specifications. The draft CQAP shall be submitted with the prefinal design and the final CQAP shall be submitted with the final design. The CQAP shall contain, at a minimum, the following elements:

- 1. Responsibilities and authorities of all organizations and key personnel involved in the design and construction of the Remedial Action.
- 2. Qualifications of the Quality Assurance Official to demonstrate he possesses the training and experience necessary to fulfill his identified responsibilities.
- 3. Protocols for sampling and testing used to monitor construction.
- 4. Identification of proposed quality assurance sampling activities including the sample size, locations,

frequency of testing, acceptance and rejection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation. A description of the provisions for final storage of all records consistent with the requirements of the Unilateral Administrative Order (UAO) shall be included.

5. Reporting requirements for CQA activities shall be described in detail in the CQA plan. This shall include such items as daily summary reports, inspection data sheets, problem identification and corrective measures reports, design acceptance reports, and final documentation. Provisions for the final storage of all records shall be presented in the CQA plan.

V. SUMMARY OF MAJOR DELIVERABLES/SCHEDULE

A summary of the project schedule and reporting requirements contained in this SOW is presented below:

Submission	Due Date
1. RD/RA Work Plan	Within thirty (45) days after the effective date of the UAO
4. Prefinal Design (95%)	Thirty (30) days after USEPA's approval of Final RD/RA Work Plan
5. Final Design (100%)	Thirty (30) days after receipt of USEPA's comments on the Prefinal Design
6. Award RA Contract(s)	Thirty (30) days after receipt of USEPA's Notice of Authorization to Proceed with RA
7. Pre-Construction Inspection and Meeting	(15) days after Award of RA Contract(s)
8. Initiate Construction of RA	<pre>15 days after Pre- Construction Inspection and meeting</pre>
9. Completion of Construction	Within 8 months of effective date of UAO

10.	Prefinal Inspection	No later than 15 days after completion of construction
11.	Prefinal Inspection Report	15 days after completion of prefinal inspection
12.	Final Inspection	15 days after completion of work identified in prefinal inspection report
13.	Final O&M Plan	No later than Prefinal Inspection
14.	Construction Completion Report	30 days after final inspection